## XY-Y50L 50W+50W HIFI Stereo Bluetooth 5.1 Amplifier Module

### 1.Description:

XY-Y50L is a high-power 50W+50W HIFI Stereo Bluetooth 5.1 Audio Amplifier Module which also can be controlled by APP Sinilink and remote controller. It can modify the Bluetooth name and password, also can turn ON/OFF Bluetooth prompt tone.

2.0 channels audio signal output. Built-in amplifier module therefore it can connect to loudspeaker directly. It supports Bluetooth music receive and AUX/USB audio input. It is ideal for DIY wireless Bluetooth speakers and transponders.

## 2.Features:

- 1>.Bluetooth APP Control: It can not only be used as an ordinary Bluetooth receiver, but also use the special Bluetooth APP SiniLink to achieve the play state switching and sound quality playback.ON/OFF Prompt Voice, Modify Bluetooth Name, ON/OFF Bluetooth Password, Modify Bluetooth Password, Switch Bluetooth/AUX/USB Audio, Adjust Volume for Prompt Voice.
- 2>.Remote Control: It uses an infrared remote control with silicon rubber buttons which can improve user experience. It can adjust the volume, switch music, switch audio mode, switch sound effects, and also mute and turn off the power which can implement remote control and more convenient operation
- 3>.HIFI 50W+50W Dual Channel Stereo: It has a built-in amplifier chip to provide 50W\*2 high power drive capability with DC 9V-24V work voltage.Recommended to use more than 5A current to get more clear, bright and high fidelity sound.
- 4>.Bluetooth/AUX/U-disk Audio: It can not only receive music via Bluetooth, but also via AUX and U-disk to fit different needs. It is capable of playing WAV, WMA, FLAC, APE, MP3 and APE music files.
- 5>.Easy and fast operation: It only needs to connect the matching power supply and speaker to start working. The on-board 360° infinite tuning potentiometer can not only adjust the volume, but also playing and pause easy and fast operation. At the same time, an IPEX external antenna socket is reserved for effective receiving Bluetooth signals when the XY-Y50L is installed in a metal box.
- 6>.Protection Function: It has multiple protection mechanisms to ensure its safe operation with Over-voltage protection, under-voltage protection, short-circuit protection, overheating protection, clipping protection.
- 7>.Application: Perfect for home theaters, KTVs, outdoor parties, and more, this Bluetooth amplifier will improve sound quality and provide a surround sound experience. It is easy to install and use, allowing you to experience an immersive sound with minimal effort.

#### 3.Functions:

- 1>.Bluetooth APP Control
- 2>.Remote Control
- 3>.Bluetooth/AUX/U-disk Audio Input
- 4>.HIFI 50W+50W Dual Channel Stereo
- 5>.ON/OFF Prompt Voice
- 6>. Modify Bluetooth Name
- 7>.ON/OFF Bluetooth Password
- 8>.Modify Bluetooth Password
- 9>.Adjust Volume for Prompt Voice
- 10>.360° Infinite Adjust Volume

#### 4.Parameters:

- 1>.Product name:XY-Y50L 50W+50W HIFI Stereo Bluetooth 5.1 Amplifier Module
- 2>.Model:XY-Y50L
- 3>.Work Voltage:DC 9V-24V(12V or more recommended)
- 4>.Work Current:>5A
- 5>.Unique function:Sinilink APP control
- 6>.Channel:2.0 channel stereo output
- 7>.Bluetooth:BLE 5.1
- 8>.Audio input type:Bluetooth/AUX/U-disk
- 9>.Audio output type:Left/Right
- 10>.Adjust volume:360° Potentiometer adjustment
- 11>.Frequency range:20Hz-20KHz
- 12>.Music format for U-disk: WAV, FLAC, APE, MP3
- 13>.Output power:
  - 13.1>.Output power 10W\*2 at 12V 8ohm
  - 13.2>.Output power 20W\*2 at 12V 4ohm
  - 13.3>.Output power 30W\*2 at 24V 8ohm
  - 13.4>.Output power 50W\*2 at 21V 40hm
  - 13.5>. The voltage cannot exceed 21V at 40hm
  - 13.6>. The voltage cannot exceed 24V at 80hm
- 14>.Communication distance:15meter(Max)
- 15>. Over temperature protection: Yes
- 16>.Short circuit protection:Yes
- 17>. Over voltage protection: Yes
- 18>.Under voltage protection:Yes
- 19>.Clipping protection:Yes
- 20>.Work Temperature:-20°C~85°C
- 21>.Work Humidity:5%~95%RH
- 22>.Module Size(Installed):54\*47\*22mm

#### 5.Use steps:

- 1>.Choose the right speakers and connect as shown in wiring diagram.
- 2>.Connect to right power supply from DC-005 power socket.LED indicator will flashing and it means that module enters pairing mode.And then speak prompt voice and it means

that module is waiting for pairing.

- 3>.Turn ON Bluetooth on phone.
- 4>. Select Bluetooth device 'XinYi' or modified name in your Bluetooth device listing.
- 5>.LED indicator will keep ON and it means that module is successfully connected and is waiting for playing.
- 6>.XY-Y50L will playing music after select music on phone.LED indicator will keep slowly blinking.
  - 7>. Adjust potentiometer to change volume as you need.
- 8>.Open APP Sinilink and register an account if need control by APP. Note: You can choose to log in as a tourist without registering.
  - 9>.Click the dot in the left to add device.
  - 10>.Select 'Bluetooth devices' and then Search Bluetooth.
  - 11>. Select devices 'Sinilink-APP' or 'XinYi' or 'XYV122V....' to connect module.
- 12>.User can adjust volume, select next or previous, play/pause, select EQ, reset name, enable/disable/set password, enable/disable Bluetooth prompt tone.
  - 13>.XY-Y50L will speak prompt voice if disconnected.

# **6.Application:**

- 1>.Modified/repair/replace speaker
- 2>.Amplifier equipment for training/activity site and so on
- 3>.Car Bluetooth device
- 4>. Music Festival Party
- 5>. Family entertainment and leisure
- 6>.Games and Cinema

#### 7.Package:

- 1>.1pcs XY-Y50L 50W+50W HIFI Stereo Bluetooth 5.1 Amplifier Module
- 2>.2pcs Aluminium Alloy Shell
- 3>.1pcs Remote Controller
- 4>.1pcs DC-005 Power Connector
- 5>.1pcs 6mm knob cap
- 6>.1pcs '+' screwdriver
- 7>.4pcs M2\*14mm copper column
- 8>.4pcs M2\*4+3mm copper column screw
- 9>.8pcs M2\*3mm screw

#### 8.Note:

- 1>.The power amplifier board should be as far away as possible from the WIFI signal (router) avoid signal interference.
- 2>.It is power supply voltage DC 9V-24V with more than 5A current. Module will be damaged if input voltage is more than 24V.
  - 3>.It is recommended to use a working power supply of more than 12V.
  - 4>.Please don't use too long wires to avoid signal interference.
- 5>.There can be enough power output only when the audio input is sufficient and the power supply voltage/current input is sufficient.
  - 6>. The higher the power supply voltage, the greater the output power.

- 7>. The smaller the impedance of the speaker, the greater the output power. It is recommended to use 40hm speaker.
- 8>.1.Users can directly enter the app as tourists without registering. BUT tourists can only use the Bluetooth function and can not use all functions for APP.
  - 9>.Please read use manual and description before use.

## 9. Frequently Asked Questions:

## 1>. How to choose a power supply adapter?

A: The power supply of the module is very critical. The user must pay enough attention to the power supply. Otherwise it may not work properly.

The power supply is critical. The ripple of the selected power supply must be small. A power supply with a large ripple will cause the background noise of the power amplifier board to become larger and there will be current sound.

It needs 5.5\*2.1mm or 5.5\*2.5mm power adapter and it is recommended to use 12V power supply with current more than 5A.

The higher the voltage and the higher the current then the better the output power. It is better to connect 40hm speaker if the power voltage less then 21V. It is recommended to use 24V voltage if use 80hm speaker.

It will be damaged if input voltage is more than 24V.

If the voltage is too low, the sound will be distorted after the sound is amplified.

If the current is too small, the speaker cannot be driven to work or the speaker will pull the voltage low and resulting in abnormal operation or poor sound quality.

Adjust the volume to the maximum may be distorted and affecting the sound quality if input low power adapter such as 12V 1A adapter.

#### 2>.How to choose a speaker?

A:Commonly used speakers are generally 40hm~80hm. The speaker no need distinguish between positive and negative polarity.

The left and right channel speakers need to be connected to full-range speakers or high-frequency speakers and the power is between 10W~60W. The rated power is 50W\*2.

It can also work properly if the speaker has low power such as 10W~20W. But it needs connect to low power adapter such as less than 15V to prevent damage to the speaker.

User don't have to worry about the problem of the speaker burning out if connect to 50W~60W speaker. Module can connect 12V~24V. The higher the voltage selected, the greater the sound or power that can be output.

Speaker power cannot exceed 60W, otherwise it will affect the sound quality.

#### 3>. How to choose Bluetooth or AUX audio input mode?

A: AUX/USB mode takes priority over Bluetooth mode. If you wish to use Bluetooth as your input audio signal, you must first disconnect the AUX or USB. AUX and USB connections take precedence.

# 4>.Why is the volume working normally when volume small and there is turbidity after increase volume?

A: Sound distortion. Please change the adapter power supply with higher voltage and current. Or decrease the volume.

# 5>.Why is the volume working normally when volume small and there is pause after increase volume?

A: The input power is insufficient. Please change the adapter power supply with higher voltage and current.

Power supply itself intermittent power-off protection. Please change a match power adapter.

The power of the power supply is too large so please reduce the power of the input power.

The power amplifier board is seriously heated resulting in trigger overheat protection. So please increase the radiator.

# 6>.What factors are related to the sound quality?

A:The sound quality is not only related to the power amplifier module but also related to the power supply, sound source and the entire sound system.

Basically every factor of the sound system will affect the sound quality. The main factors include the audio transmission line, audio power supply, tone circuit, power amplifier circuit, speaker and surrounding environment.

The sound quality is the best when the sound source, power supply, power amplifier module and speaker match.









